

Elements of a Science Fair Project



At the request of many of our judges, we have prepared a few guidelines to aid you in your work. We would appreciate your comments and suggestions.

NOTEBOOK

Every project should have a notebook, a detailed written record of the scientific study. The contents should be specific and concise and should display the student's use of the scientific method. Among its contents should be an Abstract, Hypothesis (or, in the case of engineering and computer projects, a Statement of Goals), Procedures (showing sufficient repetition of tests/experiments), Results, Conclusions, Recommendations, Bibliography and Appendix (tables, figures, raw data). Additional sections may include an Introduction, Background Information, Nomenclature, Statement of Theory, Statistical Analysis and other topics specific to the individual project. Although you will not be able to thoroughly examine every notebook, you will find it helpful to check the contents at least briefly.

DISPLAY/BACKBOARD

The display is essentially a compromise of content versus time. Ideally, it should stand on its own, describing the major elements of the project and should be easily read from 3 feet away. If logically and neatly organized, it should require no more than sixty seconds reading time. While appropriate graphs, photographs, illustrations and equipment displays are encouraged, gimmicks (e.g., flashing lights) are not. If, after reviewing the display, you feel confused rather than hungry for more, it has not served its primary purpose – but keep in mind that it is only a small part of the overall project.

INTERVIEW WITH THE EXHIBITOR

A genuine interest in the student's work, coupled with the determination to make judging a positive learning experience, is a good formula to use here.

The interview...

- a) allows students to present their work in their own way,
- b) permits the judges to, by asking specific questions, review the work done and determine the student's understanding of the field, and
- c) encourages verbal communication between exhibitors and judges.

Ideally, exhibitors will be well organized, familiar with their field of study, relatively composed, courteous and eager to learn.

Please remember, however, that for many young exhibitors this is their first experience in a pressure situation. The importance of a positive approach cannot be over-emphasized. Your own maturity will prove a valuable tool in drawing out theirs.

THE OVERALL PROJECT

A display may be dazzling, the notebook neat and well written and the interview eloquent, however if the basic project idea (the question to be answered or the problem to be solved) and method of answering or solving it won't fly, the student has not become a better scientist or engineer by doing the project. A review of the Judging Criteria on the score sheet available at the fair should prove useful in evaluating the overall project.